

Notice of Allowability

Application No.

10/687,869

Examiner

Andrew T Piziali

Applicant(s)

BERGSTROM ET AL.

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/20/2003.
2. ☒ The allowed claim(s) is/are 10-24.
3. ☒ The drawings filed on 20 October 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 10/20/2003
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Amend the application as follows:

IN THE SPECIFICATION:

After the title, amend the first paragraph of the specification as follows:

--This application is a U.S. national phase of PCT application No. PCT/FI98/00737, filed September 18, 1998, and a divisional application of U.S. Application Serial No. 09/508,463, filed March 10, 2000 now abandoned.--

Allowable Subject Matter

2. Claims 10-24 are allowed.
3. The following is an examiner's statement of reasons for allowance:

The closest prior art is USPN 5,198,280 to Harpell et al. (hereinafter referred to as Harpell). Harpell is concerned with the creation of an article having improved impact resistance suitable for use as a vehicle panel (column 1, lines 15-18). Harpell discloses that the panel may comprise at least two reinforcing layers of unidirectional parallel fibers (column 2, lines 27-50). Harpell discloses that the layers may be aligned at various angles with respect to other layers (column 2, lines 30-35). Harpell teaches that a wide variety of angular orientations may be used (column 4, lines 46-65), but Harpell does not specifically teach the claimed side aspect ratio of the panel in conjunction with the claimed fiber angle.

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As illustrated in Figure 3 of the current application, with a side aspect ratio of 1 a fiber orientation of $\pm 45^\circ$ is most preferable with respect to the failure index. The prior art fails to teach or suggest that with a side aspect ratio of ≥ 1.5 a fiber orientation of $\pm 45^\circ$ would not be most preferable with respect to the failure index. The prior art fails to teach or suggest the unexpected results associated with the use of a fiber orientation of between about 55° and 75° in conjunction with a side aspect ratio of ≥ 1.5 . The prior art fails to teach or suggest the unexpected results of a reduction in the failure index by 10%, an increase in stiffness by 10%, and consequently, a weight savings of approximately 10% in the final product if the mechanical properties are to be kept unchanged.

MPEP 2144.05 states, "Applicants can rebut a prima facie case of obviousness based on overlapping ranges by showing the criticality of the claimed range. "The law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims. . . . In such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range." In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990)."

MPEP 716.02(a) states, "Absence of property which a claimed invention would have been expected to possess based on the teachings of the prior art is evidence of unobviousness. Ex parte Mead Johnson & Co. 227 USPQ 78 (Bd. Pat. App. & Inter. 1985) (Based on prior art disclosures, claimed compounds would have been expected to possess beta-andrenergic blocking activity; the fact that claimed compounds did not possess such activity was an unexpected result sufficient to establish unobviousness within the meaning of 35 U.S.C. 103.)."

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

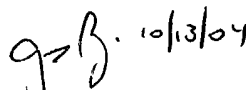
Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

atp


ANDREW T. PIZIALI
PATENT EXAMINER


Ms. Arti R. Singh
Primary Examiner
Tech Center 1700